

What is claimed is:

1. A method for preparing a transformed *Cucumis melo*, which comprises the steps of:

5 (a) inoculating a cotyledon from *Cucumis melo* with *Agrobacterium tumefaciens* harboring a vector, in which the vector is capable of inserting into a genome of a cell from *Cucumis melo* and contains the following sequences:

10 (i) a replication origin operable in the cell from *Cucumis melo*; (ii) a promoter capable of promoting a transcription in the cell from *Cucumis melo*; (iii) a structural gene operably linked to the promoter; and (iv) a polyadenylation signal sequence,

15 (b) regenerating the inoculated cotyledon in a regeneration medium containing 3.0-8.0 mg/l of kinetin as growth regulator and 0.5-3.0 mg/l of IAA (Indole-3-acetic acid) and culturing the inoculated cotyledon to obtain regenerated shoots; and

20 (c) culturing the regenerated shoots on a rooting medium to obtain the transformed *Cucumis melo*.

2. The method according to claim 1, wherein an amount of kinetin in the regeneration medium of step (b) is 5.0-7.0
25 mg/l.

3. The method according to claim 1, wherein an amount of

IAA in the regeneration medium of step (b) is 1.0-2.0 mg/l.

4. The method according to claim 1, wherein an amount of NAA in the rooting medium of step (c) is 0.08-0.2 mg/l.

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5. The method according to claim 1, wherein the step (a) is executed in an inoculating medium containing 3.0-8.0 mg/l of kinetin, 0.5-3.0 mg/l of IAA and 50-200 μ M of acetosyringone.

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6. The method according to claim 1, wherein the regeneration medium further comprises 0.5-2.0 mg/l of CuSO_4 .

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7. A method for preparing a transformed *Cucumis melo*, which comprises the steps of:

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(a) inoculating an cotyledon from *Cucumis melo* with *Agrobacterium tumefaciens* harboring a vector in an inoculating medium containing 3.0-8.0 mg/l of kinetin, 0.5-3.0 mg/l of IAA and 50-200 μ M of acetosyringone, in which the vector is capable of inserting into a genome of a cell from *Cucumis melo* and contains the following sequences:

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(i) a replication origin operable in the cell from *Cucumis melo*; (ii) a promoter capable of promoting a transcription in the cell from *Cucumis melo*; (iii) a structural gene operably linked to the

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promoter; and (iv) a polyadenylation signal sequence,

(b) regenerating the inoculated cotyledon in a regeneration medium containing 5.0-7.0 mg/l of kinetin and 1.0-2.0 mg/l of IAA as growth regulators and CuSO₄ as a regenerating accelerating agent to obtain regenerated shoots; and

(c) culturing the regenerated shoots to obtain the transformed *Cucumis melo* on a rooting medium containing 0.08-0.2 mg/l of NAA.

8. A transformed *Cucumis melo* prepared by the method according to any one of claims 1-7.

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